APPENDIX B
BILLINGS FIELD OFFICE PROPOSED FIRE MANAGEMENT PLAN

Background: The Billings Field Office is located in south central Montana. It includes approximately 446,000 surface acres of public lands. Grasslands and shrublands are the most common land cover categories. About 175,000 acres or 39 percent of the public lands are considered grasslands. Low and very low cover grasslands are the most common land cover type of public land within the Field Office boundaries. Almost 168,000 acres (38 percent) of the public lands are considered shrubland. Wyoming big sagebrush steppe and big sagebrush steppe are the most common shrub vegetation land cover. Less than 40,000 acres (about 9 percent) of public lands are considered forest lands and less than 4,400 acres (about 1 percent) of public lands are riparian areas. About 11 percent of the public lands are made up of other categories such as exposed rocks and badlands. Between 1978 and 1998, 44 fires were reported to have started on public lands. These fires burned 2,920 acres. Average fire size was 66 acres and the largest fire burned 870 acres of forestlands. Most of the wildland fires occurred in July and August.

The Billings Field Office contains six fire management zones (Billings Grasslands, Roundup, Pryor Mountains, Big Timber/Absaroka, Twin Coulee WSA, and Pompey's Pillar National Monument and ACEC), eight ACECs and one proposed ACEC (Bridger Fossil, Castle Butte, East Pryor Mountains, Four Dances-proposed, Meeteetse Spires, Petroglyph Canyon, Pompey's Pillar, Stark Site, and Weatherman Draw). It also contains four Wilderness Study Areas (WSAs) (Burnt Timber Canyon, Pryor Mountain, Big Horn Tack On, and Twin Coulee). (See Map 3.)

Planning guidance: Current guidance includes The Areas of Critical Environmental Concern ROD (Billings, Powder River and South Dakota, p. 2 & 3) (March 1999), the Billings RMP on pages 2 and 3, the Pompeys Pillar ACEC Management Plan decisions dealing with fire management (page 9) and forestry (page 9).

The Billings RMP will be updated as necessary to include the fire management objectives and guidance for each fire management zone described below.

Wildland fire suppression and rehabilitation guidance common to all areas within the Billings Field Office boundaries: All of the Billings Field Office fire management zones are B category areas. In addition to the state guidelines found in Appendix A, the following resources or values will be given further consideration as specified.

Cultural: "Light on the land" fire tactics would apply when fire threatens high value cultural and paleontological resources and values. Appropriate fireline tactics may include the use of natural barriers and hand constructed fireline.

Prescribed fire and other fuels management guidance common to all areas within the Billings Field Office boundaries. All of the Billings Field Office fire management zones are B category areas. Guidelines are found in Appendix A.

BILLINGS GRASSLANDS (B1)

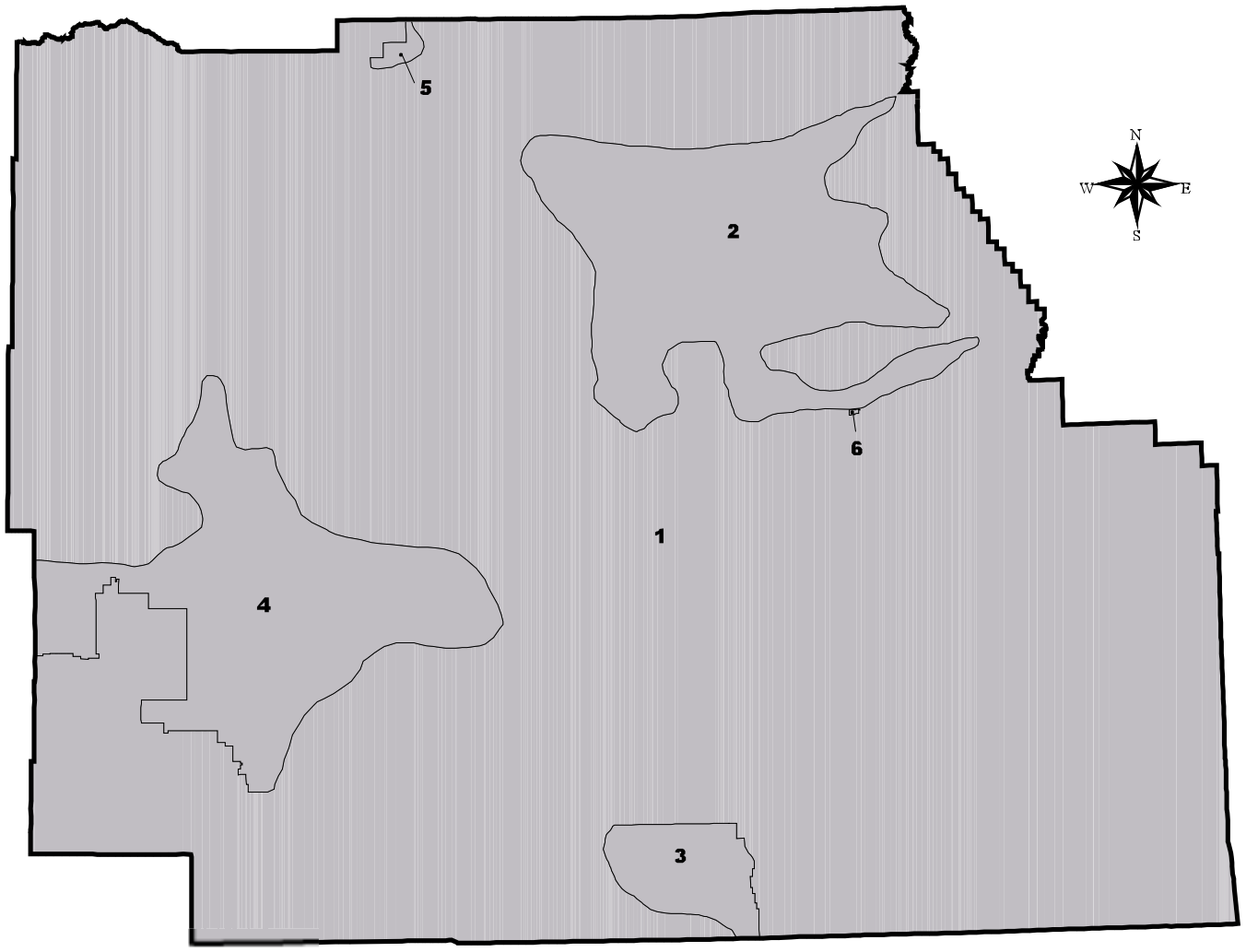
Area description: Except for a few small parcels of public land scattered throughout the area, most of the public land is in northern Musselshell County, eastern Yellowstone County, or in southern Carbon County. The remaining area is predominately private land used for livestock grazing, irrigated farming or small grain production. Wildlife include: whitetail and mule deer, antelope, upland game birds, turkeys, elk, raptors, songbirds and numerous small mammals, amphibians, and reptiles.

The Billings Field Office manages approximately 262,000 surface acres of public lands in the Billings Grasslands (Area 1). Shrublands (approximately 117,900 acres) and grasslands (approximately 108,100 acres) are the most common land cover categories. About 45 percent of the public lands are considered shrubland and 41 percent are grasslands. Less than five percent (about 8,000 acres) are forest lands and less than 2,300 acres are classified as riparian vegetation. The predominant vegetation is western, thickspike and bluebunch wheatgrass, needle and thread grass, green needlegrass intermixed with big and silver sage. Most of the public land exists in scattered ownership patterns with the exception of the Cottonwood Triangle area in Carbon county, which begins south of the city of Bridger, bordered by highway 310 on the east and the Beartooth Mountains on the west, extending to the Wyoming border. This block of public land accounts for the highest incidence of wild fire.

Four additional small areas exist within the Billings Grasslands. These are 1. Sundance Lodge Recreation Area, 2. Four Dances Natural Area, 3. South Hills, and 4. Acton area.

1. The Sundance Lodge Recreation Area is a small tract of land (379.9 acres) at the confluence of the

MAP 3
BILLINGS FIELD OFFICE



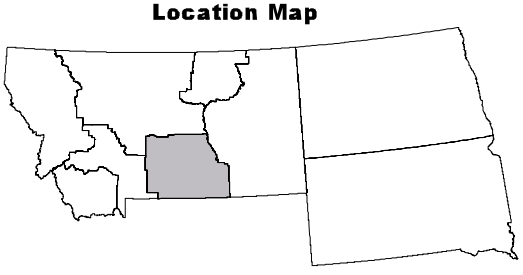
Fire Management Category

A
B
C
D

Scale
30 0 30 60 Miles

1 Billings Grasslands
2 Roundup
3 Pryor Mountains
4 Big Timber-Absaroka
5 Twin Coulee WSA
6 Pompeys Pillar

Location Map



Yellowstone and Clarks Fork of the Yellowstone river, south of the city of Laurel. The area consists of farm land intermixed with mature cottonwood and shrubs, along the Clarks Fork River. This area includes habitat for whitetail deer, pheasants, waterfowl, and songbirds. Fuel models 1,2,5 and 6. Fuel loads range from .74 to 6.0 ton/acre.

2. The Four Dances Natural Area (765 acres) is a tract of land immediately south of Billings. Heavy recreation use is anticipated due to proximity to the city of Billings. This area consists of native grasses including wheat and needle grasses, sagebrush and pine along the rims above the Yellowstone River and cottonwood and brush along the river bottom. This area has been nominated for ACEC status. Fuel models 1, 5. Fuel loads range from .74 ton/acre to 3.0 ton/acre.

3. The South Hills area is directly south of Billings along the Yellowstone River. This tract of land lies between the river and a developed subdivision. The vegetation includes native wheat grass and needle grasses, sagebrush and a small amount of pine. This area fits fuel model 1. Fuel loads average .50 ton/acre.

4. The Acton area consists of six sections of public land north of Billings. The area consists of native wheat grass, needle grasses with mixed pine and big sagebrush. Grazing and recreation are the primary uses of this area which fits fuel models 1 and 2. Fuel loads range from.74 tons/acre to 4.0 tons/acre.

These areas require special considerations due to urban interface, ACEC issues and higher fire danger resulting from heavy recreational use. Fuel models 1 and 5 fit the majority of this area, with fuel types 6 in the Clarks Fork Recreation area. The topography is generally rolling hills. Soils vary from silty 10-14 inch precipitation zone (PZ) to dense clay-clayey-saline upland complex 5-9 inch PZ.

Wildland fire history: Between 1978 and 1998, 26 fires started on BLM administered public lands. These fires burned an estimated 1,060 acres. Most of the area burned (approximately 940 acres) was shrublands. Only about 120 acres of grasslands and less than 3 acres of forest lands burned during this period. The largest fire burned almost 80 acres of shrublands. Average fire size was 12 acres on shrublands and about 10 acres of grasslands. The largest grassland fire was about 50 acres. More than 75 percent of all the BLM fires were less than 10 acres in size. Only one fire on shrublands was larger than 100 acres.

Interface: Urban interface is scattered throughout the parcels of public land. The heaviest concentration of developments near BLM land is around the Sundance Lodge Recreation Area exchange and South Hills areas. Other interface areas include Shepard Ah Nei, Four Dances Natural Area, and the Acton area.

Area concerns and constraints: Concerns include the North Absaroka and Washakie Wilderness class I airsheds to the south, the Billings and Laurel air quality non-attainment areas, urban interface (Sundance Lodge Recreation Area and South Hills), heavy fuel loading in the Sundance Lodge Recreation Area, and high fire danger associated with heavy recreational use (South Hills, Acton area, Sundance Lodge Recreation Areas, Four Dances Natural Area). The public is especially concerned about fire management on the Four Dances Natural Area and Sundance Lodge Recreation Area due to proximity to Billings and Laurel. Concerns that require fire management consideration are: forage production, riparian areas, wildlife habitat on public lands, and crop and forage production on adjacent private lands. Areas nominated for ACEC designation include the Bridger Fossil area for paleontological values, the Castle Butte Site for rock art, Meeteetse Spires for unique vegetation and scenic values, the Stark site for cultural values, Weatherman Draw for rock art and unique cultural values, and the Four Dances Natural Area for cultural, historic, and natural hazard values. The Acton area, Hamilton's (Asparagus) Point, Shepherd Ah-Nei area (North portion), and the South Hills all have OHV restrictions.

Resource objectives: Resource objectives include: 1) maintaining native species where they currently exist while managing non-native weeds, 2) managing for diversified grasslands which provide livestock and wildlife forage, and nesting and rearing habitat, 3) managing for a healthy mix of grass prairie with a diversity of warm and cool season perennial grass species with minor components of shrubs. Other objectives include limiting or minimizing erosion; maintaining sagebrush cover with a mosaic of community and dispersion of plants; maintaining sagebrush cover in designated Sage grouse wintering/ nesting areas; protecting, maintaining, and enhancing crucial wildlife habitats, wetland and riparian habitats, existing or potential fisheries habitats, and habitats for threatened and endangered species. Unique resource values at Crooked Creek Natural Area have been identified for protection.

Fire objective: Wildland fire is not desired due to urban interface, ACECs, the large amount of agricultural production and other values and uses on private and state land. The appropriate management response to wildland fire within the Billings Grasslands would generally be aggressive fire suppression. Prescribed fire may be used in the Billings Grasslands.

Wildland fire suppression and rehabilitation guidance:

Cultural - The application of fire retardant would be avoided within the Petroglyph Canyon ACEC and Weatherman Draw ACEC that contain petroglyphs and pictographs. A Resource Advisor will be on site during wildland fire suppression and rehabilitation efforts to insure compliance with the decisions and guidelines for each of the following ACEC areas: 1. Bridger Fossil area ACEC, 2. Stark Site ACEC, 3. Petroglyph Canyon ACEC, 4. Weatherman Draw ACEC, and 5. Meeteese Spires ACEC.

ROUNDUP (B2)

Area description: The Billings Field Office manages approximately 88,000 surface acres of public lands in the Roundup area (area 2). Most of the parcels of public land are in southern Musselshell and northern Yellowstone counties. Grasslands (approximately 42,000 acres) and shrublands (approximately 40,000 acres) are the most common land cover categories. About 48 percent of the public lands are considered grasslands and 45 percent are shrublands. About six percent (about 5,700 acres) are forest lands and less than 400 acres are classified as riparian vegetation. Vegetation within the area consists primarily of ponderosa pine, and Rocky Mountain juniper, intermixed with little bluestem, bluebunch and western wheatgrass, sideoats grama, native legumes, and sage brush. Ponderosa pine and grasses are characteristic of Fuel Models 1 and 2. Sagebrush areas are characteristic of Fuel Model 5. The predominant fuel models on public lands are models 1 and 5, with fuel load averages of .74 tons/acre to 3.0 tons/acre. Isolated parcels of public land consist of Ponderosa pine/native grasses mix, Fuel Model 2, with fuel loads of 4.0 tons/acre.

The topography consists of rolling to hilly and broad valleys, draining into the Musselshell River on the north and the Yellowstone River on the south. Soils are forest-grassland complex 10-14" PZ. This area provides habitat for deer, antelope, elk, grouse, pheasants, wild turkeys, waterfowl, raptors and songbirds. Numerous cultural sites exist within this area. The area is predominately used for livestock grazing and dryland farming. The area is rich in coal and has a history of coal production. Most of the land within this area is private with parcels of public land scattered throughout the area. Heavy recreational use and urban interface pose a special concern on a 4,800 acre parcel of public land within this area known as Ah-Nei, which is located north of the town of Shepherd. A large subdivision and numerous small homes form the west border of the Ah-Nei area. This area is used for grazing and provides recreational opportunities for motorcycles, dirt bikes, hikers, and horseback riders.

Wildland fire history: Between 1978 and 1999, 16 wildland fires started on BLM-administered public lands. Five of these fires started on grasslands, 10 started on shrublands, and one started on forestlands. These fires burned an estimated 1,880 acres. The area burned was about equally split between grasslands (approximately 950 acres) and shrublands (approximately 930 acres). The only fire on forestlands burned six acres during this period. The largest fires burned 640 acres of shrublands. Average fire size was 190 acres on grasslands but only about 90 acres on shrublands. The largest grassland fire and the largest shrubland fire were the same size at about 640 acres each. More than 70 percent of all the BLM shrubland fires and 40 percent of grassland fires were less than 10 acres in size. Only one fire on shrublands was larger than 100 acres.

Interface: Urban interface is scattered throughout the parcels of public lands with the largest concentration near the Shepard Ah-Nei area.

Area concerns and constraints: Concerns include the Billings and Laurel air quality non-attainment areas, urban interface (especially near the Ah-Nei area), unique cultural values (rock art) at Castle Butte ACEC, forage production, riparian areas and wildlife habitat on public lands as well as crop and forage production on adjacent private lands. Hamilton's (Asparagus) Point, Shepherd Ah-Nei area (North portion), and the Butte all have OHV restrictions. Coal seams at the surface in the Bull Mountains are a concern for fire management. The Crooked Creek drainage has been identified as Special Status Species habitat.

Resource objectives: Resource objectives include maintaining native species where they currently exist while managing non-native weeds; management of the area for diversified grasslands which will provide livestock and wildlife forage, and nesting and rearing habitat; and management for a healthy mix of grass prairie with a diversity of warm and cool season perennial grass species with minor components of shrubs. Other objectives include limiting or minimizing erosion; maintaining sagebrush cover in a mosaic community and dispersion of plants; maintaining sagebrush cover in designated sage grouse wintering/nesting areas; protecting, maintaining, and enhancing crucial wildlife habitats, wetland and riparian habitats, existing or potential fisheries habitats, and habitats for threatened and endangered species. OHV use restrictions exist to protect designated resource values.

Fire objective: Wildland fire is not desired due to urban interface, ACEC issues, and the large amount of agricultural production especially on adjacent private and state land. Appropriate management response to wildland fire would be aggressive suppression. Prescribed fire may be used to reduce fuels buildup or to mitigate or avoid effects of wildland fire.

Wildland fire suppression and rehabilitation:

Cultural- The application of fire retardant would be restricted within the Castle Butte ACEC.

PRYOR MOUNTAINS (B3)

Area description: The Pryor Mountains are located 30 miles south of Billings in Carbon county. Four Wilderness Study Areas (WSAs) exist in the Pryor Mountains: 1. Pryor Mountain WSA, 2. Big Horn Tack On WSA, 3. Lost Water WSA (Forest Service), and 4. Burnt Timber Canyon WSA. This area also includes the East Pryor Mountain Horse Range ACEC encompassing the Pryor Mountains wild horse range. Public lands adjoin the Crow Reservation on the north and the Big Horn Canyon National Recreation Area on the east and Pryor Mountain unit of the Beartooth National Forest on the west. The remaining area is surrounded by private lands. The majority of the land is public ownership administered by the US Forest Service and the Bureau of Land Management. Small tracts of private land intermingle with public lands along the border with the Crow Reservation. BLM is responsible for fire protection on all public land within this area including private lands for which wildfire protection is the responsibility of BLM (affidavit lands). These affidavit lands are located in the Sage Creek drainage within the boundaries of the Beartooth unit of the Custer National Forest. The terrain is very steep with elevations to 8,300 feet. Deep, vertical walled canyons cut into the limestone. Chimney canyons, steep slopes, strong upslope winds and difficult access pose fire control concerns. Two flowing creeks, Crooked Creek and Sage Creek, form the major drainage. Crooked Creek flows into Big Horn Lake. Sage Creek drains to the north and west around the mountain and then south to the Shoshone river.

The Billings Field Office manages approximately 43,000 surface acres of public land in the Pryor Mountains area (area 3). Grasslands (approximately 20,800 acres) make up 49 percent of the land cover; shrublands (10,800 acres) make up 25 percent of the land cover; and forestlands (10,300 acres) make up about 24 percent of the land cover. Vegetation can be broken into two distinct groups: 1. mature Subalpine fir/spruce and Douglas fir, limber pine forest, intermingled with grassland made up of: Idaho fescue, bluebunch and slender wheatgrass, Columbia and green needlegrass, lupine, larkspur and black sagebrush, with pockets of isolated lodgepole pine forest , and 2. a band of Rocky mountain Juniper/mahogany and big sagebrush along the south aspect at lower elevations. Fuel loads range from .74 ton/acre in the grassy areas to 3 to 5 tons/ acre in the Douglas fir complex. The majority of fuels fit the fuel models 1, 8, and 10.

Soils range from silty range 10-14 inch PZ to grazable woodland complex in the 15-19 inch PZ, with calcarious sub soils on steep mountain slopes. Numerous cultural sites exist in the area. The area has a history of shaft mining for uranium and contains a number of old mine shafts, numerous claim validation pits and roads from past mining activities. This area provides habitat for deer, big horn sheep, black bear, wild horses, blue grouse, ruffed grouse, raptors and song birds. Trout habitats in Crooked Creek and the Big Horn river are impacted by runoff. Insect infestation exists in the east portion along the south aspect. The area is predominately used for timber, firewood, recreation and livestock grazing. Area ownership is approximately 30 percent BLM, 1 percent private, and 69 percent Forest Service (FS).

Wildland fire history: Between 1978 and 1999, nine fires started on BLM administered public lands. Two of these fires started on grasslands, three started on shrublands, and three started on forestlands. These fires burned only 10 acres, most of which was shrublands.

Interface: Urban interface exists in the Sage Creek area. Private cabins and several working ranches make up the creek bottom. Most cabins are inhabited only periodically. The private lands within this area subscribe to and are classified as affidavit lands.

Area concerns and constraints: Concerns include firefighter safety due to steep terrain, chimney canyons, strong upslope winds and heavy fuel loading. Other concerns include providing protection to affidavit lands in the Sage Creek area, protecting the Pryor Mountains wild horse range ACEC values, protecting cultural resources in the East Pryor Mountains ACEC, commercial timber on adjacent Forest Service land, crucial wildlife habitat, watershed values, controlling weeds, and complying with OHV restrictions on the Pryor Mountain Wild Horse Range and four WSAs.

Resource objectives: Resource objectives include providing a mosaic of forage and cover types to accommodate wildlife species, limiting or minimizing erosion, maintaining the natural vegetation and landform characteristics to protect the WSAs and the East Pryor Mountain ACEC values, maintaining a mosaic of vegetation that provides 10 to 30 percent sagebrush/ curlleaved mountain mahogany, and maintaining sage-brush cover in designated mule deer/ bighorn sheep wintering areas.

Fire objective: Wildland fire is not desired due to the East Pryor Mountain ACEC guidelines, Wilderness Study Areas, Crow Reservation lands, Forest Service lands, timber and other resources of high value. Since steep

terrain and heavy fuel loads in some areas compromise fire fighter safety, modified suppression may be used to assure safety. Appropriate management response would be aggressive fire suppression. Prescribed fire and other fuels management strategies may be used to reduce hazardous fuels or to mitigate or avoid effects of wildland fire.

Wildland fire suppression and rehabilitation: "Light on the land" and conditional fire suppression tactics, consistent with resource, ACEC and wilderness study area guidelines may be used to protect resource values.

Grazing Management: Management options which encourage the production of understory grasses and forbs by limiting wild horse grazing will be considered after a wildland fire.

BIG TIMBER/ABSAROKA (B4)

Area description: Public lands exist in scattered parcels in Sweetgrass and Stillwater counties. Some parcels are in the foothills adjoining the Beartooth /Absaroka mountain ranges south and west of Big Timber and extend south to Beehive. The Gallatin and Beartooth National Forests border many of these tracts on the south. Portions of the adjacent Absaroka/Beartooth wilderness area contain decadent stands of lodgepole pine. The topography consists of rolling and very steep hills, which drain into the Boulder, Yellowstone, and Stillwater Rivers. Other parcels are scattered throughout the area and are surrounded by private land.

Approximately 17,200 acres of public land are scattered throughout area 4. About half (8,400 acres) is classified as forestland, 38 percent (6,500 acres) is grasslands, and 12 percent (2,100 acres) is shrublands. The predominate vegetative type is Douglas fir forest, fuel model 8, mixed with rough fescue, Idaho fescue, bluebunch and slender wheatgrass, mountain brome and big sagebrush, fuel models 1 and 5. Fuel loading ranges from .74 tons/acre to 3 tons/acre. Portions of the Beartooth Wilderness Area are included in the boundary. Soils are generally silty 10-19" PZ. This area provides habitat for deer, elk, bear, grouse, raptors and songbirds. Fish habitat is affected in the Yellowstone, Stillwater, and Boulder rivers by runoff from these drainages. The primary use of the area is for timber, firewood, recreation, and livestock grazing. Access is generally good, with the exception of occasional locked gates on private land.

Wildland fire history: No wildland fires were reported on public lands between 1978 and 1999.

Interface: Urban interface is scattered throughout the area.

Area concerns and constraints: This area experiences high winds which can be extreme, creating extreme, erratic, fire behavior. Large amounts of state, private and public lands are intermingled with public lands. The area contains high value timberland and wildlife habitat, including elk winter range. Other concerns include the potential effects on fisheries in the Yellowstone, Stillwater, and Boulder rivers. Special Status fish species habitat exists in Bad Canyon, and OHV use is restricted in Bad Canyon.

Resource objectives: Resource objectives include managing to provide a mosaic of forage and cover types to accommodate wildlife species, protecting timber values, maintaining crucial wildlife habitat, and preserving recreation opportunities. The vegetation management objective is to manage for a healthy mix of grass prairie with a diversity of warm and cool season perennial grass species with minor components of shrubs.

Fire objective: Wildland fire is undesirable because of commercial timber, agricultural production, private and state land, adjoining wilderness and Forest Service lands. The appropriate management response to wildland fire in this area would be aggressive fire suppression. Prescribed fire and other fuels management strategies may be used to reduce hazardous fuels or to mitigate or avoid effects of wildland fire.

Wildland fire suppression and rehabilitation: Careful evaluation of erosion potential and habitat damage before using earth moving/tillage equipment is appropriate.

TWIN COULEE WSA (B5)

Area description: Twin Coulee WSA is a block of public land in Golden Valley county south of Lewistown. It borders the south edge of the Snowy Mountains and adjoins the Lewis and Clark National Forest on the north. Private lands border the public lands on the east and south sides. Much of the private lands have been commercially logged and provide roads for access and fire control.

The Twin Coulee WSA consists of approximately 7,000 acres of public land, of which 96 percent is classified as forestland. Vegetation consists of ponderosa pine/Douglas fir on the east side, Douglas fir forest complex on the south and west (fuel model 8, fuel loads of 5.0 tons/acre), and limber pine at lower elevations (fuel model 2 with fuel loads of 4.0 tons/acre). Islands of lodge pole pine are

intermingled with the Douglas fir stands on the south side of the area and encompass large areas in the adjoining Forest Service lands (fuel model 10 with fuel loads of 8-10 tons/acre). Open parks are made up of Fescue, Colombia needlegrass, bearded wheatgrass, mountain brome, and many forbes (fuel models 1 and 5 with fuel loads of .74 to 3.0 tons/acre). Slopes are very steep and rocky with a south aspect. Soils are shallow silty in the 10-14 inch precipitation zone. Some areas are very rocky and subject to erosion. Heavy fuel loading occurs, except in areas that have burned recently. These areas are prone to pine beetle infestations. Historic burn characteristics show the area is susceptible to severe damage from wild fire.

Wildland fire history: Between 1978 and 1998, only two fires started on public lands. One of these burned about 870 acres and the other burned about two acres. Both fires occurred on forestland.

Interface: A single cabin exists on private land adjacent to the WSA.

Area concerns and constraints: Concerns which affect wildland fire severity and firefighter safety include heavy fuels, steep slopes, beetle infestation, distance from Billings, and accessibility. Other concerns include wildlife habitat and watershed protection, valuable resources on adjacent private lands, compliance with the guidelines of the WSA, and high erosion potential.

Resource objectives: Public lands will be managed to provide a mosaic of forage and cover types to accommodate wildlife species. The natural vegetation and landform characteristics would also be maintained to protect WSA characteristics. Timber values should be protected as much as possible, while maintaining habitat for wildlife.

Fire objectives: The concerns and constraints noted above make wildland fire undesirable. The appropriate management response to wildland fire within the Twin Coulee WSA would include the most effective methods of suppression that are least damaging to the wilderness values and other resources. These suppression efforts will also be in compliance with the WSA guidance and in a way that minimizes potential habitat destruction and erosion. Careful consideration of the potential benefits, values protected, and erosion potential will precede the use of heavy equipment. Prescribed fire and other fuels management strategies may be used to create fire breaks, reduce fuel loading, or to mitigate or avoid effects of wildland fire. Prescribed fire may also be used in the WSA but would avoid unnecessary impairment of the area's suitability for preservation as wilderness.

POMPEYS PILLAR NATIONAL MONUMENT AND ACEC (B6)

Area description: Pompeys Pillar National Monument (approximately 51 acres) and the surrounding Pompeys Pillar ACEC area (approximately 431 acres) are 30 miles east of Billings along the Yellowstone River. This area consists of the six-acre national landmark, the monument, a visitor center and associated outbuildings, irrigated cropland, and a large island in the Yellowstone river.

Climate is typical of semi-arid environment. Summers are warm with temperatures sometimes exceeding 100 degrees, July high temperatures average in the low 80's, while January highs are in the teens. Annual precipitation averages 10-14 inches with 60 percent of the growing season moisture coming during May and June. Hail, severe thunder storms and blizzards often occur and sometimes damage property or threaten lives.

Pompeys Pillar is an isolated block of sandstone on the south side of the river bank of the Yellowstone River. The pillar landform rises abruptly more than 100 feet above the surrounding level plain. The materials forming the pillar, as well as the rugged cliffs on the north side of the river, probably correspond to the Hell Creek formation. The Pillar itself is designated a National Historical Landmark because of the significance of William Clark's signature and the association of the Pillar with the Lewis and Clark Expedition.

This area provides habitat for whitetail deer, pheasants, waterfowl, raptors, and songbirds.

The area is characterized by fuel loads that range from .74 to 6.0 ton/acre. Fuel models 1 and 5 fit the majority of this area, and with fuel types 6.

The topography is generally rolling hills. Soils vary from silty in the 10-14 inch precipitation zone to dense clay-clayey-saline upland complex in the 5-9 inch precipitation zone. Most of the land south and east of the pillar has been cultivated for the past 50-100 years. Some of this area near the pillar will be planted with native vegetation. The land north and east of the pillar has not been cultivated and is presently covered with a dense cottonwood riparian woodland.

Wildland fire history: Since 1991, when the BLM acquired Pompeys Pillar, there have been three wildland fires on the property. The largest burned less than 20 acres of woodlands on the island; another burned less than 0.1 acre of grasslands at the base of the Pillar; and the third occurred on grasslands and shrubs along the railroad tracks along the Southeast boundary of the ACEC.

Interface: The BLM proposes to build a 5,700 square foot interpretative center east of the Pillar along the edge of the cottonwood trees and remove the existing visitor center east of the Pillar. A day-use area immediately north of the center is also proposed.

Area concerns and constraints: Fire management concerns include the potential for fires from an estimated 130,000 visitors per year. The peak period for visitors occurs during mid to late summer when temperatures are warm and the potential for fire danger is high. Other concerns include the presence of a national landmark, a national monument, an ACEC, and other archeological and historic resources. Structures that need fire protection include a visitor center and a proposed interpretative center.

Resource objectives: Emphasize both the recreation and the historic setting of 1806 with a moderate level of facility development and visitor services. Prepare and manage the area for the Bicentennial of the Lewis and Clark Expedition (2003-2006). Accommodate a large number of visitors (estimated 130,000 annually). Preserve the Montana Class II air quality designation. Preserve the rock art and inscription panels on Pompeys Pillar NHL. Identify, record and evaluate additional cultural properties. Protect cultural sites. Limit the use of OHV to designated roads and trails. The Class II visual resource management (VRM) objective for the NHL is to retain the existing character of the landscape (the level of change to the landscape should be low). The VRM class III management objective of the remainder of the Pompeys Pillar ACEC is to partially retain the existing character of the landscape (the level of change to the characteristic landscape should be moderate). Maintain natural riparian areas in Proper Functioning Condition, provide forage and cover with plantings, and improve fisheries habitat on the channelized stream. Maintain the existing canopy cover of the cottonwood bottoms. Minimize the potential for hazardous materials contamination. Maintain soil productivity, prevent and/or minimize accelerated soil erosion, prevent and/or minimize flood damage and protect municipal and domestic water supplies. Control weeds and insects while minimizing the use of chemicals.

Fire objectives: Wildland fire is not desired due to the National Historic Landmark, the National Monument, the ACEC values, large amount of visitor use, adjacent private land, and structures. The appropriate management response to wildland fire within Pompeys Pillar would include the most effective methods of suppression that are least damaging to the National Historic Landmark, the Monument, and to the ACEC values and resources. Prescribed fire may be used to reduce fuels buildup, restore the natural environment, or to mitigate or avoid effects of wildland fire.

Wildland fire suppression and rehabilitation:

Initial Attack: Initial attack would continue to be coordinated through agreements with local fire departments.

National Historic Landmark and National Monument: Initial attack would be restricted to application of water. No heavy equipment, hand tools, or mechanized equipment that would cause surface disturbance would be allowed.

Remainder of land at Pompeys Pillar: Appropriate management response to wildland fire in the rest of the area would allow the use of available resources including dozers, motor graders, tractors with plows, air tankers, and fire fighting crews except as noted below and listed in management common.

Riparian areas: Use of retardant and heavy equipment would not be allowed in riparian areas.

Prescribed burning and other fuels management:

Forestry: Wood product sales would be allowed to remove hazardous fuels.